

REMARKS/ARGUMENTS

In response to the Office Action mailed May 12, 2008, Applicants amend their application and request reconsideration. No claims are added or cancelled so that claims 1-9 remain pending.

In this Amendment obvious errors, in grammar and the use of one reference number, in a portion of the patent application are corrected. None of these errors is substantive.

Three of the nine pending claims are amended. Claim 1 is initially amended simply to supply the meaning of the terms that have been identified only with acronyms. The final paragraph is changed, mostly simply rearranged, to improve the grammar of that paragraph. The revised paragraph makes the invention far more understandable and more accurately describes the invention, particularly the embodiment of the invention explained with respect to Figure 4 of the patent application.

In the invention, employing a CSMA method, a dynamic, meaning real-time, adjustment is made in communication quality control parameters before ordinary data and audio data are transmitted from a base station to terminals. The control is exercised by the communication quality control parameter setting means by adjusting communication quality control parameters, for respective terminals, based upon downstream and upstream communication traffic information. In the embodiment of Figure 4, the quality parameter setting means is separately provided as elements 117 and 119 for the data transmission queue and the VoIP queue. The quality parameter setting means 117 and 119 are connected to and controlled by the communication control function portion 111, which generally corresponds to the communication quality control parameter control means. The exercise of this control is described, at among other locations, in the patent application at page 10.

In this Amendment an error in a reference number on that page 10 is corrected and some other clarifying changes are made without introducing new matter or substantively amending the specification. Attention is particularly directed to the

latter half of that page 10 of the specification. In Figure 4, the arrangement is exemplified by the inputs to the quality parameter setting means 117 and 119 from the communication control function 111, and specifically the quality parameter control function 111a.

The other claim amendments are directed to matters of form. In claim 5 words that are inappropriate and that were added in the Preliminary Amendment are removed. The grammar of claim 9 is improved.

As described in the patent application, in the communication system using the CSMA technique, there is a continual, real-time adjustment of quality control parameters in the transmission of ordinary and audio data from a base station to each of a plurality of terminals. As explained in dependent claim 4, the quality control parameters are controlled and adjusted in each of the terminals through information provided by a beacon of the base station. Those of ordinary skill of the relevant arts recognize that a beacon is a transmitter that sends needed information to each of a plurality of receiving devices, here the terminals.

Claims 1-9 were rejected as unpatentable over Beach et al. (published U.S. Patent Application 2002/0054575) in view of Wentink (published U.S. Patent Application 2003/0053469). This rejection is respectfully traversed.

In the rejection of independent claim 1, the sole pending independent claim, Beach was relied upon as supplying every element of claim 1. Yet, the rejection of claim 1 is not for anticipation, but for obviousness. At page 3 of the Office Action, it is acknowledged that Beach does not describe communication quality control parameter control means as in the final paragraph of claim 1. Wentink was relied upon for that part of the claimed invention and allegedly “teaches various QoS parameters being changed, computed and up-dated properly by an access point during a process of allocating resources for data transmission with different levels of priorities.”

Paragraphs [0038] – [0044] of Wentink were cited as supplying these features of claim 1. However, upon careful attention to Wentink, it is apparent that there is no disclosure there that meets the terms of claim 1.

With respect to Beach, Applicants readily acknowledge that Beach describes a LAN system using CSMA technique. Beach also describes dividing data into ordinary data and VoIP data, although those exact terms are not always used either in the patent application or in Beach. Further, Beach describes, and makes its principal feature, the priority given to VoIP data over ordinary data in transmission.

Wentink is described as providing and controlling quality of service with QoF in a LAN over which data, which may include audio data, is disseminated. However, Wentink like Beach, does not describe dynamic adjustment of quality control parameters for each terminal based upon upstream and downstream communication traffic information. According to the Office Action, such a disclosure is present in Beach in paragraphs [0049]-[0052] and [0056]-[0058] and in Wentink in paragraphs [0038]-[0044]. Applicants respectfully disagree with the Examiner's interpretation of the disclosures of the two references.

Paragraphs [0049]-[0052] of Beach solely describe the formation of two separate queues and the prioritization already referred to. There is description of adjusting quality control parameters based upon communication traffic information. Similar description appears in the second set of cited paragraphs of Beach. Those paragraphs particularly pertain to distinguishing the packets of ordinary data from the packets of voice or VoIP data. The prioritization discussed there has nothing to do with signal quality, only time sequence.

Likewise, the cited paragraphs of Wentink concern prioritization and responses to data collisions that can occur in a CSMA system. The base station generates quality parameters that are required for operation by the terminals. These parameter sets are dispersed to the respective terminals using a beacon that broadcasts to the terminals. While this description in Wentink may relate to dependent claim 4, it does not relate to independent claim 1. Wentink does not describe a control means that dynamically controls the communication quality control parameter setting means in the base station and which affects the downstream traffic quality. Therefore Wentink, like Beach, fails to supply anything similar to the communication quality control

parameter control means of claim 1 and cannot establish *prima facie* obviousness as to any of claims 1-9.

With respect to the dependent claims, it is frequently difficult, if not impossible, to correlate the rejections with the respective references. The enumerated paragraphs on which the rejections are based are not indicated as pertaining to Beach or Wentink. It is, therefore, impossible to understand many of the rejections. Applicants respectfully request that, in the next communication, any rejection include a citation of the reference relied on as well as page and line or paragraph number.

Of course, claims 2-9 are patentable for the same reason that claim 1 is patentable.

In addition, claim 3 is separately patentable. Contrary to the Office Action, paragraph [0074] of Beach does not describe discarding excessive length parts of queue. That paragraph describes equal-sized queues having lengths determined by system limitations. Furthermore, reference is made to a lack of storage capacity. However, there is no explanation of what is done with portions of queues that exceed system limitations. That disclosure is insufficient to describe the limitation of claim 3.

With respect to dependent claim 6, none of the cited paragraphs of Beach or Wentink describes establishment of a count table nor anything equivalent to a count table. See pages 26 and 27 of the patent application. Thus, claim 6 is patentable independent of the patentability of claim 1.

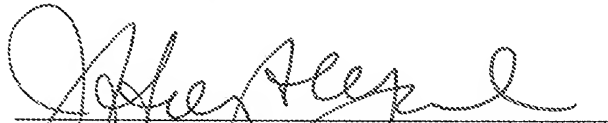
Likewise, there is no description in the cited portions of Beach that in any way describes the transmission rate coefficient table constructed and used by the base station according to claim 7. See the description in the patent application concerning Figure 13 at pages 26-28, for example. Nothing similar is found in Beach so that claim 7 is clearly patentable over the prior art cited and applied.

Claim 9 describes the effect of the beacon upon what are referred to as nomadic terminals that are within range of the base station but not otherwise a permanent part of a combination of a base station and fixed terminals. According to that description of claim 9, a nomadic terminal, which does not include a communication quality control parameter control means, is rendered incapable of transmitting data during a

period when a beacon is transmitted to the other terminals. See the description in the patent application at page 19 with reference to Figure 6. Although careful attention has been given to the cited passages of Wentink, the only one of the applied references that describes a beacon, nothing similar to claim 9 has been found. Thus, claim 9, like many of the dependent claims, distinguishes from the prior art, independent of the patentability of claim 1.

Because of the enumerated differences between the invention as claimed and the prior art, reconsideration and allowance of claims 1-9 are earnestly solicited.

Respectfully submitted,



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Date:  October 6, 2007

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